INSTRUCTIONS

INSPECTION AND LUBRICATION SCHEDULE

(EXPORT DIESEL ELECTRIC LOCOMOTIVES POWERED WITH GE ENGINES)

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GENERAL INFORMATION

The intervals suggested in this schedule are for the use of the Railroad Mechanical Departments in preparing their Locomotive Work Sheets.

Since conditions vary from one locomotive service assignment to another, these intervals are recommended only as a guide, with actual needs to be determined through experience.

For successful locomotive operation, the railroad must provide:

1. Competent workmen and supervision
2. Adequate maintenance facilities, tools, shop supplies and renewal parts
3. Fuel lubricating oil, and water treatment equal to or better than that specified.
4. Perform Inspection and Maintenance according to planned schedule, and keep adequate records.

When Servicing:

1. Never mix lubricants of different brands or grades, with the exception of engine lubricating oils in the same class.
2. Too much lubrication can be as harmful as too little. NEVER OVERFILL.
3. Always clean the grease fittings before adding grease, and clean the equipment covers if they are removed during service.
4. Use only clean containers when handling lubricants.

The following equipments have sealed bearings and require no periodic lubrication until the device is overhauled:

1. Alternator
2. Traction Motor
3. Fuel Booster Pump Motor
4. Exciter
5. Auxiliary Generator.

ENGINE LUBRICATING OIL ANALYSIS AND CONDEMNING LIMITS

Daily or trip tests of the lube oil viscosity and water content should be made to prevent fuel dilution or water contamination.

Viscosity should be measured at 210 F (99 C). If it is measured at 100 F (38 C), the limits chosen should be such that the 210 degree viscosity for the particular oil being used meets the requirement in the chart below.

The following is a minimum list of lubricating oil properties which should be determined during laboratory analysis of engine oil being tested. The suggested method of each case refers to the American Society for Testing Materials Handbook.

These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the General Electric Company.

Verify numbers for parts, tools, or material by using the Renewal Parts or Tool Catalogs, or contact your General Electric representative for assistance. Do not order from this publication.

CONDEMNING LIMITS OF ENGINE LUBRICATING OIL

Property	Recommended Method	Limit For Superior Class II Higher Alkalinity (Generation 3) Use With Class A Fuel Only	Limit For Extra Performance (Generation 4)
Viscosity	ASTM D445		
Max. at 210 F (99 C)		100 SSU	100 SSU
Min. at 210 F (99 C)		70 SSU	70 SSU
Total Base Number	ASTM D664	2.0	2.0
Water Contamination (Max.)	ASTM D95	0.2%	0.2%
Pentane Insolubles (Max.)	ASTM D893	3.0%	5.0%

Because of wide variations in character between lubricating oils of different brands, it is recommended the oil supplier be contacted to assist in the development of an oil renewal schedule and to set forth the limiting factors peculiar to his oil.

NOTE 1: ***The frequency with which lubricating oil must be changed will vary from one locomotive service assignment to another. Factors influencing the frequency of change include the kind of service, the nature of the terrain over which the locomotive operates, the kind of fuel oil, and the kind of lube oil.***

If viscosity, total base number, water contamination, and insoluble content tests are not all performed at least once a month, then a complete oil change is required every four months. Four months is an absolute maximum oil change interval. It is not a guarantee of adequate engine protection.

NOTE 2: ***The frequency with which fuel oil filters must be changed will also vary, depending upon the kind of service, the kind of fuel oil, its purity at the time it enters the locomotive fuel tank, and ambient temperature conditions, among other things.***

Experience is the best guide on which to base filter renewals in accord with time or mileage. The intervals suggested in this schedule are considered to be average.

DAILY OR TRIP

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
Engine Crankcase	DE-2 RM-4		Check and maintain oil level to full mark on bayonet gage with engine idling. Check for contamination.	See Fuel and Lube Specification GEK-61435
Cooling Water	DE-12		Check level to be between midpoint and 1/2 in. from top of sight glass. Add water with approved rust inhibitor if level is low (see Inspection and Maintenance).	Capacity - See Locomotive Data
Governor Oil	DE-8		Maintain oil level between upper and lower marks on sight glass with engine idling.	SAE 10W-30 Grade MS or better
Cylinder Firing		Audible check of cylinder performance.		
Lube Oil		Check for fuel dilution and water contamination.		See Lubricating Oil Analysis Tests, Page 1.
Leaks		Check for evidence of exhaust gas, lube oil, water, fuel, brake system and air intake.		
Cooling Water System	DE-12	The coolant should be checked (inhibitor concentration and pH value) with sufficient frequency, particularly until its condition reaches a steady state, to insure its condition is maintained within limits. Thereafter, periods between sampling checks should never exceed one month.		
Engine Air Filters		Check for trip indication or red band warning. Clean or replace filters.		
Belt Drives (if used)	ME-1	Inspect.		
Sanders, Bell, Horn, Window Wipers and Lights	AE-3, AE-4, AE-6	Check operation.		
Main Reservoir and Dirt Collector		Drain condensate as required (manual or automatic).		
Brake Rigging	T-2	Check for loose parts, proper shoe-to-wheel clearance, and acceptable piston travel.		
Shutter Louver Control Filter		Open drain-cock, and blow out dirt and condensate.		

DAILY OR TRIP (Cont'd.)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
Fuel Tank	RM-4		Fill.	See Fuel and Lube Specs. GEK-61435.
Sand Boxes	RM-1		Fill.	Use clean dry sand. Capacity - see Locomotive Data.
Barco Speed Recorder	ME-3		Check instrument lubricant level. On instruments with lubricating pump, maintain level at line on oil filter. On instruments with gravity feed fill, oil manifold.	Texaco URSA P-10 or equivalent
C-P Speed Recorder - Models C and D - Oil Lubricated	ME-3		Check and maintain oil level in worm gear housing and in reversing gear chamber.	SAE-10 or -20 Oil
			Check level of red circulating oil in sight glass. Oil level must be maintained at full. Add oil to flexible driveshaft until it shows in bottom of sight glass.	Chicago Pneumatic Circulating Oil
C-P Speed Recorder - Models C and D - Grease Lubricated	ME-3		Check level of red circulating oil in sight glass. Oil must be maintained at full.	Chicago Pneumatic Circulating Oil
Hasler Speed Recorder	ME-3			
Gear Boxes			Fill up with grease bi-monthly to about 1/3 level in gear wheel housing.	GE Spec. D6A2C5
Flexible Shafts			Add lubricant bi-monthly through the fittings until 1/4 of the space between the inner flexible shaft and the inserted steel strip is filled with grease.	GE Spec. D6A2C5

ONE MONTH
(These Items In Addition To Preceding Schedule)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
Lube Oil Filters	DE-13	Remove old elements. Clean housing. Install new elements	Change elements, maximum filter element life is two months.	
Engine Crankcase	DE-2, RM-3	Bar engine over. Visually inspect condition of cylinder walls, piston skirts, cams, areas around piston pins, articulated rod pins and bushings. Also check inside of crankcase doors and door pockets for signs of loose metal or sludge.	Make complete laboratory analysis of lube oil sample, to determine if oil is suitable for continued use. If acceptable, fill to FULL mark, with engine idling. If not acceptable, drain, remove, clean, and replace lube oil suction strainer. Refill with approved oil. See Note 1, Page 2.	See GEK-61420 and GEK-61421, TAB RM-3, for approved lubricants
Cylinder Valve Mechanism	DE-2	Visually inspect rocker boxes for signs of overheating, lack of lubrication, loose or broken parts.		
Exhaust Manifold		Check tightness of connections at cylinders and at turbocharger, and check for leakage.		
Panelbath Air Filter	ME-6		After engine has been shut down five minutes or more, check level and add oil, if needed, through the grill on the front of the filter cover, maintaining level between FULL and ADD marks in sight glass.	Mineral oil or engine crankcase oil
Air Compressor or Compressor/ Exhauster	AE-2		Check and maintain oil level to full mark on gage.	WABCO - GE Spec. D50E13B below 10 F (-12 C) GE Spec. D50E13C above 10 F (-12 C) G-D - GE Spec. D50E13A
Engine Cab Door Filters (if used)	ME-6		Inspect and clean. Charge with oil. See instructions.	Panel filter oil
Carbody Filters (if used)		Inspect, clean or change as required.		
Platform Drains	ME-6	Check and clean.		
Radiator Fan and Shutter Control (if used)	ME-6	See Radiator Shutter Louver Control instructions.		

ONE MONTH (Cont'd.)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
Louver Control Air Filter	ME-6		Add one oz. to fluid chamber.	Kysor Cat. B7758-4 GE Part 2X2790
Shutter Pins and Linkage (if used)	ME-6		Place a few drops at bearings.	SAE 30 Oil
Fan Eddy Current Clutch (if used)	RE-5		Remove fan cover; blow out with clean, dry air. Check slip rings, leads and brushes for defects. Replace brushes worn near the minimum length of 7/16 in. (11 mm).	
Traction Generator Gearcase	RE-1	Check oil level on dipstick.	If below ADD mark, add oil to proper level.	Engine lube oil
Center Plates	T-6		Fill oil cups to maintain level.	AAR Spec. M-963 (latest revision)
Traction Motor Axle Suspension Bearings	T-4		Fill to filler cap opening.	AAR Spec. M-963 (latest revision)
Traction Motor Gearcase	T-4	Check for heavy film of lubricant on gear teeth.	Check lubricant while it is fluid, to be level with hole or not more than 1 in. below. DO NOT add lubricant until it is at minimum level. DO NOT OVERFILL.	GE Spec. D50E8C Lubricant
Slack Adjusters	T-2		Clean grease fittings (if used), and add a small amount of grease with pressure gun.	GE Spec. D6A2C5
Flexible Traction Motor Air Duct	ME-6	Check for tightness and alignment, and rubber bellows.		
Wheels	T-5	Gage for flange wear.		
Motor Nose Suspension	T-3	Check for damaged or deteriorated rubber pads, separation of rubber pads from steel separators and for cracks in parts or welds.	Renew wear plates when excessively worn.	
Bolster Wear Plates	T-6	Check for proper clearance and excessive wear.		
Coupler	ME-2	Check operation.		
Flexible Couplings	ME-1	Inspect.		
Belts (if used)	ME-1	Inspect and check tension.		
Barco Speed Recorder	ME-3		Check oil level of wheel diameter compensator gear box and of axle drive, and maintain at half-full.	Texaco Thuban SAE-90, or equivalent

ONE MONTH (Cont'd.)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
C-P Speed Recorder - Models C and D - Grease Lubricated	ME-3		Supply additional grease to drive through the buttonhead fitting until grease escapes through pressure relief fitting at recorder end of flexible shaft. Apply with hand gun only.	Amoco Lithium Multi-purpose grease (soft), or equivalent
Hasler Speed Recorder	ME-3		Put some drops of oil in the paper feed gear lubricator.	Olyt 554, or equivalent
Bell Ringer			Apply two shots from a squirt can.	SAE 30 oil
Fuel-Tank Sump			Drain sediment from bottom of tank.	
Electrical Traction Motor, Traction Generator, Alternator Auxiliary Generator, Exciter, Braking Resistor Blower, Motor (if used), Eddy Current Clutch	RE-1, RE-3, RE-4, RE-5	Vacuum or blow out, and inspect commutator, alternator slip rings, brush rigging and leads. Clean and repair or repaint, as necessary, all creepage bands, coils, accessible parts. Renew any brushes too short to last until next inspection. Experience will indicate frequency of inspection and renewal of brushes.		
Control Equipment	CE	Inspect and clean; renew contact tips when necessary.		
Control Sequence		Check after cleaning control equipment.		
Battery	CE-8	Check voltage regulation.		
Rectifier Panels		Inspect panels for defective or failed diodes. See Control Tab for maintenance procedure.		
Axle Alternator (if used)		Check wiring for damage.		
Battery				
a. Electrolyte Level		Check in fully charged condition		
Nickel-Cadmium		See Battery Nameplate and Battery Maintenance Manual.		
Lead-Acid		See Battery Nameplate and Battery Maintenance Manual.		
b. Electrolyte Gravity		Check. Refer to Battery Maintenance Manual.		

ONE MONTH (Cont'd.)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
c. Battery Trays		Wash down or flush; grease terminals; inspect blocking and connections. **CAUTION:** ***Use care that flushing solution does not enter traction motor ventilation duct.***		

THREE MONTHS
(In Addition To Preceding Schedules)

Radiators	DE-12	Inspect for cleanliness.		
Engine Control Governor	DE-8	Check operation of low lube oil and low water pressure shutdown device. Check engine speeds at idle and 8th notch no load.		
Engine Overspeed Trip	DE-9	Check operation.		
Fuel Strainer and Filter	DE-14	Clean strainer and renew filter elements (see Note 2)		
Fuel Rack Linkage	DE-14	Check parts from power piston to fuel racks, for free operation.	Add a few drops of oil to each oiler button, or grease to each grease fitting, with engine idling.	Engine lube oil or GE Spec. D6A2C9 grease
Radiator Fan Gear Box	RE-5		Check oil level (with engine stopped). Fill to top of level plug.	Engine crankcase oil or SAE 40
Mounting Bolts Engine, Compressor/Exhauster, Radiator Fan Gear Unit, Flexible Couplings	DE-15, ME-1	Check for proper torque.		
Control Air		Check leak-off, Leakage should not exceed 3 psi in three minute test.		
Exhauster/ Compressor	AE-2			
a. Air intake filter sump (strainer type)		Drain sump.		WABCO - GE Spec. D50E13B below 10 F (–12 C) GE Spec. D50E13C above 10 F (–12 C) G-D - GE Spec. D50E13A
b. Crankcase			Drain oil. Remove, clean and replace this strainer on the oil suction pump. Refill	

THREE MONTHS (Cont'd.)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
c. Intake filters (compressor only)			Clean element, immerse in oil, drain.	Capacity: 3 cylinder - 13 qt. (12,3 liters) 4 cylinder - 23 qt. (21,7 liters) 6 cylinder - 21 qt. (19,8 liters) SAE-20 motor oil
Panelbath Air Filter	ME-6		Change oil. Clean out sump. Clean filter media.	Mineral oil or engine crankcase oil. Capacity - each filter: 8 cylinder engine - 7.6 qt. (7,2 liters) 12 cylinder engine - 6.3 qt. (5,9 liters)
Vacuum Brake System Filters (if used)	AE-5		Remove oil bowl, clean, add oil to level of oil bead on bowl.	Engine crankcase oil
Equipment Blower Coupling (Spicer)	ME-1	Check operation (see maintenance information, Tab ME-1)	Add grease at the fittings.	GE Spec. D50E21
Speed Recorder (if used)	ME-3	Dismantle and inspect axle drive.	Lubricate flexible shaft.	GE Spec. D6A2C5
Window Wiper Motor		Add oil through pipe plug opening in sufficient amount to moisten packing.		GE Spec. D50E5B oil
Electrical High and Low Voltage Circuits.		Check for grounds.		
Alarm Circuits		Check operation.		
Commutators or Slip Rings and Brushes on: Fuel Booster-Pump Motor, Traction Alternator Exciter and Auxiliary Generator, Eddy Current Clutch if so equipped.	RE	Inspect. See Rotating Equipment Tab.		

SIX MONTHS
(In Addition To Preceding Schedules)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
Engine Lube oil suction strainer	DE-14	Remove basket and clean.		
Fuel System	DE-14	Re-torque fuel injection pump mounting bolts. Inspect hoses for wear and fraying. Tighten all low pressure fuel fittings.		
Intake Port Carbon	DE-10	Check several cylinders. If carbon approaches 1/4 in., clean all ports per GEK-5807.		
Low Pressure Fuel Hose	DE-14	Inspect and replace if required.		
Lube Oil Filters	DE-13		Replace gaskets on the two dummy cover pipes (those without filter elements) at the lower end.	
Fuel Control Linkage	DE-14		Inspect, clean and lubricate spherical linkage bearings and shaft bearings.	High-temperature grease, Andok 20
Mechanical Air Brake Equipment: Valves Brake Distributing (if used) Bell Ring and Sander Control Relay Reducing Feed	AE-3	Inspect, clean and test.	Disassemble, clean, adjust and lubricate.	AAR Spec. M-912-61 oil AAR Spec. M-914-42 grease
All O-rings in Valves			(Viz: Brake, feed, control, relay, brake application, selector)	No. 2 silicone grease per Spec. MIL-L-4343
Flexible Couplings	ME-1		Remove two plugs from coupling. Insert a grease fitting and add grease. Replace plugs. See Instruction Manual.	GE Spec. D50E21 bearing grease
Traction Generator Gearcase	RE-1		Check oil level and maintain to FULL mark. Do not overfill.	Engine crankcase oil

SIX MONTHS (Cont'd.)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
Truck Pedestal-Guide and Journal Box Wear Plates	T-8	Inspect. Replace if necessary.		
Emergency Fuel Trip (if used)	RE-1	Check operation.		
Crankcase Over-Pressure Switch		Check operation.		
Barco Speed Recorder	ME-3		Lubricate flexible driveshaft.	Texaco 979RB, or equivalent
C-P Recorder (Models C and D)	ME-3		Remove recorders above Serial No. 5434 and grease intermediate shaft and needle bearings with an Alemite hand gun equipped with standard flush-type nozzle.	Amoco Lithium Multi-purpose grease (soft), or equivalent

ONE YEAR

Engine				
a. Injection Nozzles	DE-14	Remove and recondition.		
b. Fuel Pumps	DE-14	Check timing; readjust if found off.		
c. Fuel Pump Rack and Governor Power Piston	DE-9	Check for proper rack setting at specified full load power piston gap.		
d. Crankcase Over-Pressure Switch		Recondition or replace.		
e. Overspeed Link and Governor	DE-9	Recondition.		
f. Engine Governor (Woodward if used)	DE-8	Drain.	Refill with clean oil. Operate engine for five minutes. Then add to proper level.	SAE 10W-30 Grade MS or better. Capacity: 2 qt. (1,9 liters)
g. Crankshaft	DE-4	Ascertain thrust clearance is within limits.		GE Spec. D6A2C4 1.5 oz.
h. Cylinder-Valve Mechanism	DE-14	Inspect for proper tappet clearance. Adjust if necessary.		
i. Turbocharger	DE-10	Inspect "in place" for foreign material damage to compressor, free movement of rotor and condition of turbine buckets.		
Lube Oil Cooler	DE-13	Inspect and clean as required.		

ONE YEAR (Cont'd.)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
Inertial Filters	ME-6	Clean if necessary.		
Radiator Shutter Air Cylinder	ME-6	Disassemble, clean and relubricate.		
Radiator Shutter Louver Control	ME-6	Disassemble filter and renew felts, or thoroughly wash in suitable solvent and dry. Reassemble.		
Flexible Couplings	ME-1	Clean and inspect. Check backlash		
Radiator-Fan Gear Box	RE-5	Check backlash of gears.	Drain and refill with new oil.	Engine Crankcase oil or SAE 40 Capacity - see instructions
Radiator-Fan Gear Box Vertical Shaft Bearing	RE-5		Remove pipe plug, insert a grease fitting and add grease. Replace plug. See Instruction Manual.	GE Spec. D6A2C4 - 3 oz.
Radiator-Fan Eddy-Current Clutch Bearings	RE-5	Remove the clutch cover by removing three, 3/8-in. bolts and add grease at fitting. Replace cover.		GE Spec. D6A2C4 - 1.5 oz.
Traction Generator Gearcase	RE-1		Change oil.	Engine crankcase oil - Capacity 5 pt. (2,4 liters)
Dirt Exhauster (if used)	ME-1		Add lubricant.	Alvania EP NO. 3, Regal Starfax Premium No. 3, or equivalent
Equipment - Blower, Bearings	ME-1		Change grease by pumping grease into the fitting on the pillow blocks.	Grease, GE Spec. D6A2C5
Air Reservoirs		Test per railway rules.		
Bolster Side Bearings, Dust Guard and Lateral Stops	T-6	Inspect.		
Window Wipers		Disassemble and clean.		
Gages, Pressure and Temperature		Calibrate.		
Barco Speed Recorder	ME-3	See corresponding publication in Instruction Book.		
C-P Speed Recorder (Models C and D)	ME-3	See corresponding publication in Instruction Book.		
Hasler Speed Recorder	ME-3	See corresponding publication in Instruction Book.		

ONE YEAR (Cont'd.)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
C-P "Bantam" Speed Recorder Right Angle Drive	ME-3		Lubricate.	GE Spec. D6A2C5 Ball Bearing Grease
Exhauster/ Compressor Valves	AE-2	Clean.		
Traction Motor	RE-4		Drain, inspect and clean axle caps. Inspect and clean wicks in hot oil. Refill.	AAR Spec. M-963 (latest revision) Capacity per cap: GE-764-3 pt. (1,4 liters); GE-761-4 pt. (1,9 liters)
Journal Bearings (Timken AP)	T-9		Refer to journal bearing instructions for lubrication based on average monthly mileage.	AAR M-942-75 grease
Controller	CE-1		Put a few drops of oil on pins, and rollers and bushings.	GE Spec. D50E5B oil
Controller, Reverser and Braking Switch (if used)	CE-4		Apply a thin film of grease to starwheel.	GE Spec. D50E6B grease
Dynamic Braking Grids and Insulators (if used)		Inspect, and clean if necessary.		
Electrical Instruments		Calibrate.		
Fuel Booster Pump Motor and Cab Heater Fan Motor (if used)	RE-5	Inspect and clean.		
Alarms, Protective Switches and Relays		Check calibration.		
Load Test Locomotive	ET-2	See Load Testing instructions.		

TWO YEARS
(In Addition To Preceding Schedules)

Mechanical Engine Inspection				
a. Turbocharger	DE-10	Remove, disassemble, inspect and clean. Replace parts as needed.		

TWO YEARS (Cont'd.)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
b. Exhaust Manifold		Inspect internally for loose pieces which could cause turbo damage and eventual failure.		
c. Power Assembly	DE-7	Remove representative percentage of complete power assemblies, including pistons, rods and cylinder. Determine wear and deposit conditions of pistons, rings, valves, etc. Results of this inspection should be used in scheduling more extensive work. When cylinders have been removed for changing out piston rings at the regular change period, recondition all cylinders (renew all gaskets and O-rings).		
d. Timing and Auxiliary Drive Gears, Engine Gearing, Including Overspeed Governor and Camshaft Gears	DE-5	Visually inspect for tooth wear or abnormal conditions.		
e. Fuel Injection Pumps	DE-14	Recalibrate at time of piston ring change.		
f. Crossheads	DE-7	Inspect in place.		
Crankshaft to Main Generator	DE-15	Check alignment.		
Intercoolers	DE-	Inspect and clean.		

THREE YEARS
(In Addition To Preceding Schedules)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
Mechanical Engine Inspection: Main and Connecting Rod Bearings	DE-4	Inspect one or more from a representative percentage of engines to determine general bearing condition of locomotive fleet.		

FOUR YEARS
(In Addition To Preceding Schedules)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
Fuel Booster Pump and Water Pump	DE-12, DE-14	Recondition.		
Lube Oil Pump	DE-13	Recondition.		
Bonded Rubber Pump Drive	DE-3	Inspect gears for possible damage. Renew as required.		
Low Pressure Fuel Hose	DE-14	Replace.		
Trucks	T-6, T-8	Inspect and replace any wear plates as required.		
Center Plate	T-6	Inspect and replace wear plates as required.		
Journal Boxes	T-9	Rotate bearing assembly by hand to check for any abnormal condition. Disassemble, clean, inspect and relubricate bearing in accordance with instructions.		
Brake Rigging	T-2	Inspect and renew as required.		
Electrical Traction Motors	RE-4	Recondition.	Clean and repack - motor armature bearings. See Motor instruction.	GE Spec. D6A2C10 bearing grease
Fuel Booster Pump Motor	RE-5	Renew bearings.		
Cab Heater Motor and Cab Fans (if used)		Recondition.		
Pressurizing Blower, MG Set (if used)	ME-1, RE-5	Recondition.	Disassemble, clean and lubricate.	GE Spec. D6A2C4 bearing grease
Dynamic Braking Blower Motor (if used)		Recondition.		
Battery	RE-5	Remove, clean and paint boxes.		
Compressor/ Exhauster or Compressor	AE-2	Overhaul. See Compressor/Exhauster or Compressor instructions.		

EIGHT YEARS
(In Addition To Preceding Schedules)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
Mechanical Engine		Remove all components, completely inspect, recondition as necessary and re-assemble.		
Vibration Damper	DE-3	Renew.		
Radiator Fan Gear Unit and Eddy Current Clutch	RE-5	Recondition. See Fan Gear Unit instructions.	Disassemble, clean bearing and relubricate.	GE Spec. D6A2C4 bearing grease
Traction-Generator	RE-1	Recondition. See Traction Generator instructions.	Clean and repack bearings.	GE Spec. D6A2C4 bearing grease
Exciter-Auxiliary Generator	RE-3	Recondition. See Exciter-Auxiliary Generator instructions.	Clean and repack bearings.	GE Spec. D6A2C4 bearing grease
Traction Motor Blower	ME-1	Recondition.	Repack bearing.	GE Spec. D6A2C4 bearing grease
Control Equipment: Contactors, Interlocks, Relays, Reverser, Braking Switch	CE	Check operation and inspect for visible damage.	Disassemble, clean, adjust and lubricate.	See Control Maintenance instructions
Axle Alternators		Change out or rebuild.		
GA-29 Power Take-Off	RE-2	Change out or rebuild.		

AT WHEEL TURNING OR WHEN WHEELS OR TIRES ARE RENEWED

Traction Motors and Gears	T-4	Inspect. a. Measure and record insulation resistance. Run motor to check armature bearings by use of a listening rod. Check vibration. Check commutator smoothness with fiber rod; stone smooth and air cure if necessary. Inspect armature field coils, brush rigging and leads. Blow out thoroughly. Clean creepage bands.		

AT WHEEL TURNING OR WHEN WHEELS OR TIRES ARE RENEWED (Cont'd.)

ITEM	TAB REF.	INSPECTION & MAINTENANCE	LUBRICATION & SERVICING	LUBRICANT
		b. Check lateral and radial clearance of axle suspension bearings. Inspect surface of bearings and axle. Inspect felt-wick lubricators for wear and glaze. c. Clean and inspect pinion and axle gears for wear and damage. Clean and inspect gearcase. Renew seals if necessary.		
Traction Motor Axle Suspension	T-4		Drain, inspect and clean axle caps. Inspect and clean wicks. Refill.	AAR Spec. M-963 (latest revision) Capacity - per cap; 764 Motor - 3 pt. (1,4 liters) 761 Motor - 4 pt. (1,9 liters)
Traction Motor Gearcase	T-4		After draining, cleaning, and inspection, refill with new lubricant.	GE Spec. D50E8C gear lubricant. Capacity: 761 Motor - 7 lb. (3,2 kg) 764 Motor - 5 lb. (2,3 kg)
Mechanical Trucks	T-6, T-8	Inspect and replace any wear plates as required.		
Center Plate	T-6	Inspect and replace wear plates as required.	Before lowering locomotive platform into position, add oil.	AAR Spec. M-963 (latest revision) Capacity - 1-1/2 qt. (2,8 liters)
Journal Bearings (Timken AP)	T-9	Rotate bearing assembly by hand to check for any abnormal condition. Disassemble, clean, inspect bearing in accordance with instructions.	See corresponding publication in Instruction Book.	AAR M-942-75 grease
Brake Rigging Axle Alternator Drives (if used)	T-2	Inspect and renew as required. Inspect.		